

PATENT COOPERATION TREATY

PCT


INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

REC'D 07 JUL 2005

INT. PCT

Applicant's or agent's file reference 88TY1286		FOR FURTHER ACTION		See Form PCT/PEA/416
International application No. PCT/IB2004/002307		International filing date (day/month/year) 16.07.2004	Priority date (day/month/year) 25.07.2003	
International Patent Classification (IPC) or national classification and IPC G01M17/007, G07C5/00				
Applicant TOYOTA JIDOSHA KABUSHIKI KAISHA et al.				
<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 7 sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input type="checkbox"/> sent to the applicant and to the International Bureau) a total of sheets, as follows:</p> <p><input type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (sent to the International Bureau only) a total of (Indicate type and number of electronic carrier(s)) , containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p>				
<p>4. This report contains indications relating to the following items:</p> <p><input checked="" type="checkbox"/> Box No. I Basis of the opinion</p> <p><input type="checkbox"/> Box No. II Priority</p> <p><input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p><input type="checkbox"/> Box No. IV Lack of unity of invention</p> <p><input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p><input type="checkbox"/> Box No. VI Certain documents cited</p> <p><input type="checkbox"/> Box No. VII Certain defects in the international application</p> <p><input type="checkbox"/> Box No. VIII Certain observations on the international application</p>				
Date of submission of the demand 26.01.2005		Date of completion of this report 06.07.2005		
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**INTERNATIONAL PRELIMINARY REPORT
ON PATENTABILITY**

International application No.
PCT/IB2004/002307

Box No. I Basis of the report

1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ This report is based on translations from the original language into the following language , which is the language of a translation furnished for the purposes of:
- ☐ international search (under Rules 12.3 and 23.1(b))
 - ☐ publication of the international application (under Rule 12.4)
 - ☐ international preliminary examination (under Rules 55.2 and/or 55.3)
2. With regard to the **elements*** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

Description, Pages

1-39 as originally filed

Claims, Numbers

1-24 as originally filed

Drawings, Sheets

1/14-14/14 as originally filed

- ☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing
3. ☐ The amendments have resulted in the cancellation of:
- ☐ the description, pages
 - ☐ the claims, Nos.
 - ☐ the drawings, sheets/figs
 - ☐ the sequence listing (*specify*):
 - ☐ any table(s) related to sequence listing (*specify*):
4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
- ☐ the description, pages
 - ☐ the claims, Nos.
 - ☐ the drawings, sheets/figs
 - ☐ the sequence listing (*specify*):
 - ☐ any table(s) related to sequence listing (*specify*):

* If item 4 applies, some or all of these sheets may be marked "superseded."

**INTERNATIONAL PRELIMINARY REPORT
ON PATENTABILITY**

International application No.
PCT/IB2004/002307

Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	2-16,18,21
	No: Claims	1,17,19,20,22-24
Inventive step (IS)	Yes: Claims	
	No: Claims	1-24
Industrial applicability (IA)	Yes: Claims	1-24
	No: Claims	

2. Citations and explanations (Rule 70.7):

see separate sheet

RE ITEM V

**REASONED STATEMENT WITH REGARD TO
NOVELTY AND INVENTIVE STEP**

1. STATE OF THE ART

The following documents are referred to in the present communication:

D1: EP-A-0 383 593 **D2:** US-B-6 330 499
D3: EP-A-1 087 343 **D4:** WO-A-90/09645

2. NOVELTY - ART. 33(2) PCT

The present application does not meet the requirements of Art. 33(1) PCT, because the subject-matter of the **independent claims 1, 17, 20 and 23** is not new (Art. 33(2) PCT).

2.1 *Independent method claim 1*

D1 (see in particular c.2, l.29- c.4, l.19; c.7, l.9- c.9, l.19; c.11, l.25- c.12, l.21; Fig. 1-3 and 6), discloses:

a vehicular diagnostic method in which
a vehicle and a center are connected so as to be able to communicate with each other (see Fig. 1),
the vehicle transmits information regarding a failure in the vehicle to the center (see c.11, l.46-49), and the center diagnoses the failure which has occurred in the vehicle based on the information regarding the failure transmitted from the vehicle (see c.11, l.49-51), wherein
the vehicle determines whether a failure has occurred in a device mounted in the vehicle (see c.11, l.43-45);
when determining that the failure has occurred, the vehicle transmits first failure information indicating occurrence of the failure to the center (see c.11, l.46-49);
and after transmitting the first failure information to the center, the vehicle collects details regarding the failure, and transmits second failure information indicating the collected details regarding the failure to the center (see c.11, l.56-58).

All the method steps of claim 1 are known from **D1**. Consequently, the subject-matter of **claim 1** is not new.

It is to be remarked that the subject-matter of claim 1 is also anticipated by **D2** (see

c.2, l.30-43; c.7, l.61-c.8, l.64; Fig. 1 and 4).

2.2 *Independent apparatus claim 17*

D1 also discloses:

a vehicular diagnostic system,

a vehicle and a center (25) are connected so as to be able to communicate with each other (see Fig. 1),

the vehicle transmits information regarding a failure in the vehicle to the center (see c.11, l.46-49), and the center (25) diagnoses the failure which has occurred in the vehicle based on the information regarding the failure transmitted from the vehicle (see c.11, l.49-51), wherein

the vehicle comprises:

- failure detecting means (32, 34, 51, 59, 61) for detecting a failure which has occurred in a device mounted in the vehicle;
- failure information outputting means (7) for obtaining and outputting failure information indicating the failure detected by the failure detecting means (32, 34, 51, 59, 61) (see also c.11, l.43-45);
- failure information collecting means (32, 34, 51, 59, 61) for collecting failure detailed information indicating details regarding the failure detected by the failure detecting means (see also c.11, l.56-58);
- failure notifying means (105) (see c.9, l.15-19) for obtaining the failure information output from the failure information outputting means, and for notifying a user of the failure information; and
- vehicle communication means (5) (see c.7, l.15-18) for transmitting the failure information output from the failure information outputting means (7) and the failure detailed information collected by the failure information collecting means (32, 34, 51, 59, 61) to the center (25), and for receiving information related to the failure which has occurred in the device from the center (25), and

the center (25) comprises:

- center communication means (11) for receiving the failure information and the failure detailed information transmitted from the vehicle and for transmitting information regarding the failure indicated in the received failure information and the failure detailed information to the vehicle (see Fig. 1);
- failure specifics checking means (12, 18) for checking specifics of the failure based on the failure information and the failure detailed information received by the center communication means;

- countermeasure information preparing means (14, 15, 18) for preparing countermeasure information indicating countermeasures for the specifics of the failure checked by the failure specifics checking means (12, 18); and
- storing means for accumulating and storing the failure information from among the failure information and the failure detailed information received by the center communication means (see c.12, l.12-17).

All the technical features of claim 17 are known from **D1**. Consequently, the subject-matter of claim 1 is not new.

It is to be remarked that the subject-matter of claim 1 is also anticipated by **D2** (see c.2, l.30-43; c.7, l.61-c.8, l.64; Fig. 1 and 4).

- 2.3** Since the subject-matter of the ***independent claims 20 and 23*** is already included in claim 17, their subject-matter is also anticipated by **D1** as well as by **D2**.
- 2.4** The subject-matter of the ***dependent claims 19, 22 and 24*** is also anticipated by **D1** (see c.8, l.2-17).

3. INVENTIVE STEP - ART. 33 (3) PCT

The present application does not meet the requirements of Art. 33(1) PCT, because the subject-matter of the **independent claim 2** is not inventive(Art. 33(3) PCT).

3.1 Independent method claim 2

The vehicular diagnostic method of **D1** further comprises the following steps:

the center receives the first failure information transmitted from the vehicle (see c.11, l.45-49 and Fig. 6),
the vehicle collects details regarding the failure, and transmits second failure information indicating the collected details regarding the failure (see c.11, l.56-58);
the center receives the second failure information transmitted from the vehicle, checks the specifics regarding the failure based on the received second failure information (see c.11, l.58- c.12, l.3), and transmits countermeasure information indicating detailed countermeasures for the failure corresponding to the second failure information to the vehicle (see c.12, l.3-17); and
the vehicle receives the countermeasure information transmitted from the center, and notifies the user of the vehicle of the detailed countermeasures indicated in the

countermeasure information (see c.9, l.10-19 and c.12, l.17-21).

The subject-matter of the independent claim 2 differs from **D1** in that the center transmits first countermeasure information indicating countermeasures for the occurrence of the failure corresponding to the received first failure information and the vehicle receives the first countermeasure information transmitted from the center and notifies a user of the vehicle of countermeasures indicated in the first countermeasure information. The technical problem related to these method steps can be regarded as to improve the reliability of the method. This problem is addressed in the vehicular diagnostic method of **D2** (see c.1, l.27-30 and c.1, l.34-41). Indeed, in **D2** the user of the vehicle is notified of first countermeasure information indicating countermeasures for the occurrence of the failure corresponding to first failure information (see c.7, l.66- c.8, l.13). Therefore, the skilled person would include this method step in **D1** in order to solve the problem posed. For this purpose and because the diagnostic in **D1** is performed by the center, the skilled person has to adapt the center of **D1** so that the center transmits said first countermeasure information to the vehicle, thereby anticipating the subject-matter of claim 2.

Consequently, the subject-matter of the independent claim 2 lacks an inventive step.

3.2 Dependent claims 3 to 16, 18 and 21

The subject-matter of claims 3 to 16, 18 and 21 does not involve an inventive step for the following reasons:

- **claim 5:** see **D1** (see c.8, l.2-17).
- **claims 3, 4, 7, 8, 13-16, 18 and 21** only suggest changes, which are regarded as being within the scope of the customary practice followed by skilled persons, especially as the advantages thus achieved can be readily contemplated in advance.
- **claim 6:** see **D1**, c.11, l.55-56 and Fig. 6.
- **claim 9:** see the vehicular diagnostic method of **D3**, c.6, l.15-20.
- **claim 10:** see **D1**, c.11, l.40-43.
- **claim 11:** see **D1**, c.11, l.49-51.
- **claim 12:** see the vehicular diagnostic method of **D4**, p.2, l.14-16.